

ABSTRACT
DISPLAY AND SENSOR APPARATUS

An apparatus is provided which integrates sensor functionality with an active matrix display such as an AMLCD. A conventional active matrix 6 of LCD pixels 10 is provided with standard display source and gate drivers 4 and 5. The display source driver 4 supplies data signals for generating the required pixel response to column electrodes 12 which are also connected to an output arrangement 19 including sense amplifiers 20. During a display phase of operation, the AMLCD operates conventionally with the matrix 6 being refreshed a row at a time and frame by frame. Between frames, the sense amplifiers 20 are enabled and the matrix 6 is again scanned by the gate driver 5. The characteristics of each pixel represent an external stimulus which is sensed by the relevant sense amplifier 20 and supplied at an output 23 of the arrangement.